MDOT
Michigan Department of Transportation

ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
AUGUST 3, 2000 - 9:00 A.M.
EXECUTIVE CONFERENCE ROOM

Present:	C. T. Maki	G. D. Taylor	J. D. Culp
	C. Roberts	P. F. Miller	J. D. O'Doherty
	T. E. Davies	T. Fudaly	S. Bower
Guests:	M. Bott	M. Sibal	T. Myers

OLD BUSINESS

1. **Approval of the Minutes of the July 6, 2000, Meeting - C. T. Maki**

Minutes of the July 6, 2000, meeting were approved as written.

2. **New Traffic Recommendations Committee - T. Myers**

At the July 6, 2000, EOC meeting, C. T. Maki requested that the Construction Zone Advisory Committee and the Barrier Advisory Committee be combined into one. Therefore, a recommendation is made to establish a Traffic Recommendations Committee with seven members, representing as follows:

Traffic and Safety Division . . . . . Tom Myers
Second Person to be Appointed
Maintenance Division . . . . . Bard Lower
Design Division . . . . . Carlos Libiran
Construction and Technology Division . . . . . Jeff Grossklaus
Regions . . . . . John Friend (Bay)
Mark Maloney (Superior)
FHWA . . . . . Tom Fudaly, Assistant Division Administrator

The new committee will report to EOC on policy issues. Industry input will be through the regular industry partnering meetings and the Construction and Technology Division.

ACTION: The new committee structure and membership is approved, and will be organized by Tom Myers.

NEW BUSINESS

1. **Approval of Revisions to the Department's Standard Highway Signs Manual (Metric) - J. O'Doherty/M. Bott**

This manual consists of detailed sign drawings used in the actual fabrication of signs. All revisions have been reviewed and approved by the Traffic and Safety, and Maintenance Divisions. The recommendations came from those two divisions, including the Lansing Sign Shop, department field personnel, region sign shops, and sign contractors and fabricators. Several of the new or revised signs are in support of the department efforts, such as the recently approved Temporary Traffic Control for Construction Areas Typicals, Logo Signing, Car Pool Signing, and Seat Belt Signing.

ACTION: The revisions are approved and can be distributed to the holders of the Standard Highway Signs Manual (Metric). The Traffic and Safety Division will prepare a Notice to Bidders to highlight the changes to temporary sign panel materials.

2. **Cold-in-Place Recycling Pavement Rehabilitation - S. Bower**

EOC directed department pavement staff, at the July 1999 EOC meeting, to investigate any applicable uses of Cold-in-Place Recycling technology. Region and Lansing staff participated in a tour of past projects in Ontario in the Summer of 1999.

Ontario has experienced positive results with this rehabilitation method. The process consists of milling and recycling existing asphalt pavements all within a paving train operation. The recycled material is immediately re-laid and rolled similar to Hot Mix Asphalt. Cold-in-Place Recycling can be considered as an alternative to conventional mill and resurface, and crush and shape overlay projects.

A recommendation was made for the regions to program some pilot projects, after submitting for review by the Pavement Committee. Selection and design guidelines were presented along with a special provision for Bituminous Base Cold-in-Place Recycling (approval date July 14, 2000).

ACTION: The regions will submit candidate projects to the Pavement Committee for consideration. The Pavement Committee will screen proposed projects and submit proposed pilot projects to EOC for review and approval.

3. **Pavement Selections - S. Bower**

The following pavement selections were approved by EOC during the last month via email:

A. **I-496, Cedar Street to US-127: CS 33045, JN 51396**

The reconstruction alternates considered were Alternate 1, a flexible bituminous pavement, and Alternate 2, a jointed reinforced concrete pavement.

A life cycle cost analysis was performed. Alternate 2 was approved based on having the lowest Equivalent Uniform Annual Cost. The pavement design and cost analysis summary for Alternate 2 are as follows:

260 mm . . . . . JRCP (8.0m joint spacing) (Mainline & Outside Shoulder)
220 mm . . . . . JRCP (8.0m joint spacing) (Inside Shoulder)
100 mm . . . . . Open Graded Drainage Course
Geotextile Separator
150 mm . . . . . Open Graded Underdrains
219 mm +/- . . . . . Existing Sand Subbase
579 mm . . . . . Total Thickness

Present Value Initial Construction Costs $508,558/kilometer
Present Value Initial User Costs . . . . . N/A
Present Value Maintenance Costs $107,486/kilometer

Equivalent Uniform Annual Cost $33,216/kilometer

B. **M-6 Interchange With I-196, I-196 to Jackson Street: CS 70025, JN 33330**

The reconstruction alternates considered were Alternate 1, a flexible bituminous pavement, and Alternate 2, a jointed plain concrete pavement.

A life cycle cost analysis was performed. Alternate 2 was approved based on having the lowest Equivalent Uniform Annual Cost. The pavement design and cost analysis summary for Alternate 2 are as follows:

260 mm . . . . . Jointed Plain Concrete Pavement (4.5m joint spacing)
Freeway Shoulder Option
100 mm . . . . . Open Graded Drainage Course
100 mm . . . . . Aggregate Separator
150 mm . . . . . Open Graded Underdrains
300 mm . . . . . Sand Subbase
760 mm . . . . . Total Thickness

Present Value Initial Construction Costs	$324,703/kilometer
Present Value Initial User Costs	N/A
Present Value Maintenance Costs	$56,639/kilometer
Equivalent Uniform Annual Cost	$20,561/kilometer

(Signed Copy on File at C&T/Secondary)
Jon W. Reincke, Secretary
Engineering Operations Committee

JWR:JDC:kat

cc: EOC Members
Region Engineers

J. R. DeSana	R. J. Risser, Jr. (MCPA)	L. Stornant	T. L. Nelson
R. J. Lippert, Jr.	A. C. Milo (MRBA)	J. Ruszkowski	R. D. Till
D. L. Smiley	J. Becsey (MAPA)	C. Libiran	M. Frierson
M. Nystrom (AUC)	D. Hollingsworth (MCA)	G. J. Bukoski	C. W. Whiteside
M. Newman (MAA)	J. Steele (FHWA)	K. Rothwell	T. E. Myers
J. Murner (MRPA)			